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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,041	10/21/2003	Toshiyuki Oohashi	P9219.0003	4665

32172 7590 02/10/2005

DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP  
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NEW YORK, NY 10036-2714

EXAMINER
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ROJAS, BERNARD

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/689,041	OOHASHI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bernard Rojas	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 2-9 and 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 10-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12022004</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

Newly submitted claims 13-16 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Applicants newly claimed embodiment of a magnetic sensor is not originally presented.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 13-16 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. [US 6,707,298].

Claim 1, Suzuki et al. discloses a magnetic sensor comprising a giant magnetoresistive effect element [31] having a spin valve film [SV] including a pinned layer [P], a conductive spacer layer [S], and a free layer [F] comprising:

a bias magnet film [31b] composed of a permanent magnet for producing a bias magnetic field in the free layer in a predetermined direction so that the direction of magnetization in each magnetic domain in the free layer can be maintained in the predetermined initial state direction [Y-axis, col. 18 lines 10-15]; and

an initializing coil [41] that is provided in the vicinity of the free layer and applies to the free layer an initializing magnetic field in the direction same as the direction of the bias magnetic field by being energized under a predetermined condition so that the direction of magnetization in each magnetic domain in the free layer can assuredly be returned to initial state direction even if the direction of magnetization is disturbed by applying a strong magnetic field to the free layer [col. 19 lines 10-15].

Claim 10, Suzuki et al. discloses a magnetic sensor according to Claim 1, wherein said spin valve film of the giant magnetostatic effect element has a longitudinal direction; and said bias magnet gives a constant bias magnetic field to the free layer in the longitudinal direction of the free layer in order to maintain uniaxial anisotropy of the free layer [figure 12, col. 17 lines 45-50].

Claim 11, Suzuki et al. discloses a magnetic sensor according to Claim 10, comprising:

a plurality of narrow zonal portions [31a] made of the spin valve film; and

a plurality of the bias magnet films [31b],

wherein, each of the narrow zonal portions extends in the predetermined direction on the upper surface of each of the bias magnet films and joins to the adjacent narrow zonal portion so as to magnetically join to each of the bias magnet films at the upper surface of each of the bias magnet films [figure 12].

Claim 12, Suzuki et al. discloses a magnetic sensor comprising a giant magnetoresistive effect element [31] having a spin valve film [SV] including a pinned layer [P], a conductive spacer layer [S] and a free layer [F], the spin valve film having narrow zonal portions [31a] each of which extends in the longitudinal direction [col. 17 lines 45-50] , comprising:

bias magnet films [31b] provided at both ends of the free layer in the longitudinal direction for producing in the free layer a bias magnetic field in the longitudinal direction of the free layer, whereby the direction of magnetization in each magnet domain in the free layer can stably be maintained in the predetermined direction when an external magnetic field is not present [col. 18 lines 10-15; and

initializing coils [41] being energized under a predetermined condition to thereby generate an initializing magnetic field for returning the direction of magnetization in each magnetic domain in the free layer to the longitudinal direction of the free layer, whereby the direction of magnetization in each magnetic domain in the free layer can assuredly be returned to the initial state even if the direction of magnetization is disturbed by applying a strong magnetic field to the free layer [col. 19 lines 10-15].

### ***Response to Arguments***

Applicant's arguments filed 11/12/2004 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

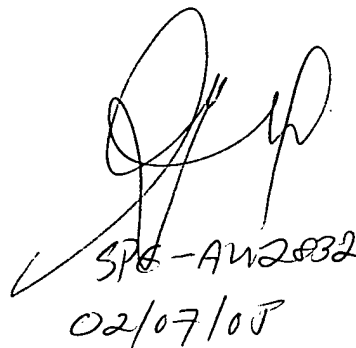
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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